

RAW SEQUENCE LISTING

Ac-Mn

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/585,841
Source: /two
Date Processed by STIC: 7/20/06

ENTERED



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/585,841

DATE: 09/02/2008

TIME: 14:24:17

Input Set : E:\211010053P1.SEQ.TXT
Output Set: N:\CRF4\09022008\J585841.raw

4 <110> APPLICANT: University of Utah Research Foundation
6 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR MODULATING
7 DHR96
9 <130> FILE REFERENCE: 21101.0053P1
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/585,841
C--> 12 <141> CURRENT FILING DATE: 2006-07-12
14 <150> PRIOR APPLICATION NUMBER: 60/536,337
15 <151> PRIOR FILING DATE: 2004-01-13
17 <160> NUMBER OF SEQ ID NOS: 60
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 1543
23 <212> TYPE: PRT
24 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
synthetic construct
30 <400> SEQUENCE: 1
31 Met Thr Leu Ser Arg Gly Pro Tyr Ser Glu Leu Asp Lys Met Ser Leu
32 1 5 10 15
33 Phe Gln Asp Leu Lys Leu Lys Arg Arg Lys Ile Asp Ser Arg Cys Ser
34 20 25 30
35 Ser Asp Gly Glu Ser Ile Ala Asp Thr Ser Thr Ser Ser Pro Asp Leu
36 35 40 45
37 Leu Ala Pro Met Ser Pro Lys Leu Cys Asp Ser Gly Ser Ala Gly Ala
38 50 55 60
39 Ser Leu Gly Ala Ser Leu Pro Leu Pro Leu Ala Leu Pro Leu Pro Met
40 65 70 75 80
41 Ala Leu Pro Leu Pro Met Ser Leu Pro Leu Pro Leu Thr Ala Ala Ser
42 85 90 95
43 Ser Ala Val Thr Val Ser Leu Ala Ala Val Val Ala Ala Val Ala Glu
44 100 105 110
45 Thr Gly Gly Ala Gly Ala Gly Gly Ala Gly Thr Ala Val Thr Ala Ser
46 115 120 125
47 Gly Ala Gly Pro Cys Val Ser Thr Ser Ser Thr Thr Ala Ala Ala Ala
48 130 135 140
49 Thr Ser Ser Thr Ser Ser Leu Ser Ser Ser Ser Ser Ser Ser Ser Ser
50 145 150 155 160
51 Thr Ser Ser Ser Thr Ser Ser Ala Ser Pro Thr Ala Gly Ala Ser Ser
52 165 170 175
53 Thr Ala Thr Cys Pro Ala Ser Ser Ser Ser Ser Ser Gly Asn Gly Ser
54 180 185 190
55 Gly Gly Lys Ser Gly Ser Ile Lys Gln Glu His Thr Glu Ile His Ser

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/585,841

DATE: 09/02/2008
TIME: 14:24:17

Input Set : E:\211010053P1.SEQ.TXT
Output Set: N:\CRF4\09022008\J585841.raw

56	195	200	205
57	Ser Ser Ser Ala Ile Ser Ala Ala Ala Ser Thr Val Met Ser Pro		
58	210	215	220
59	Pro Pro Ala Glu Ala Thr Arg Ser Ser Pro Ala Thr Pro Glu Gly Gly		
60	225	230	235
61	Gly Pro Ala Gly Asp Gly Ser Gly Ala Thr Gly Gly Gly Asn Thr Ser		
62	245	250	255
63	Gly Gly Ser Thr Ala Gly Val Ala Ile Asn Glu His Gln Asn Asn Gly		
64	260	265	270
65	Asn Gly Ser Gly Gly Ser Ser Arg Ala Ser Pro Asp Ser Leu Glu Glu		
66	275	280	285
67	Lys Pro Ser Thr Thr Thr Gly Arg Pro Thr Leu Thr Pro Thr		
68	290	295	300
69	Asn Gly Val Leu Ser Ser Ala Ser Ala Gly Thr Gly Ile Ser Thr Gly		
70	305	310	315
71	320		
72	Ser Ser Ala Lys Leu Ser Glu Ala Gly Met Ser Val Ile Arg Ser Val		
73	325	330	335
74	Lys Glu Glu Arg Leu Leu Asn Val Ser Ser Lys Met Leu Val Phe His		
75	340	345	350
76	Gln Gln Arg Glu Gln Glu Thr Lys Ala Val Ala Ala Ala Ala Ala		
77	355	360	365
78	Ala Ala Ala Gly His Val Thr Val Leu Val Thr Pro Ser Arg Ile Lys		
79	370	375	380
80	Ser Glu Pro Pro Pro Ala Ser Pro Ser Ser Thr Ser Ser Thr Gln		
81	385	390	395
82	400		
83	Arg Glu Arg Glu Arg Asp Arg Glu Arg Asp Arg Glu Arg Glu		
84	405	410	415
85	Arg Glu Arg Asp Arg Asp Arg Glu Arg Glu Arg Glu Gln Ser Ile Ser		
86	420	425	430
87	Ser Ser Gln Gln His Leu Ser Arg Val Ser Ala Ser Pro Pro Thr Gln		
88	435	440	445
89	Leu Ser His Gly Ser Leu Gly Pro Asn Ile Val Gln Thr His His Leu		
90	450	455	460
91	His Gln Gln Leu Thr Gln Pro Leu Thr Leu Arg Lys Ser Ser Pro Pro		
92	465	470	475
93	480		
94	Thr Glu His Leu Leu Ser Gln Ser Met Gln His Leu Thr Gln Gln Gln		
95	485	490	495
96	Ala Ile His Leu His His Leu Leu Gly Gln Gln Gln Gln Gln Gln		
97	500	505	510
98	Ala Ser His Pro Gln Gln Gln Gln Gln Gln His Ser Pro His Ser		
99	515	520	525
100	Leu Val Arg Val Lys Lys Glu Pro Asn Val Gly Gln Arg His Leu Ser		
101	530	535	540
102	Pro His His Gln Gln Gln Ser Pro Leu Leu Gln His His Gln Gln Gln		
103	545	550	555
104	Gln Gln Gln His His Gln Gln Gln Pro Gln Ala Leu Ala Leu Met His		
	560		
	565	570	575
	580	585	590

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/585,841

DATE: 09/02/2008
TIME: 14:24:17

Input Set : E:\211010053P1.SEQ.TXT
Output Set: N:\CRF4\09022008\J585841.raw

105 Pro Ala Ser Leu Ala Leu Arg Asn Ser Asn Arg Asp Ala Ala Ile Leu
 106 595 600 605
 107 Phe Arg Val Lys Ser Glu Val His Gln Gln Val Ala Ala Gly Leu Pro
 108 610 615 620
 109 His Leu Met Gln Ser Ala Gly Gly Ala Ala Ala Ala Ala Ala Ala
 110 625 630 635 640
 111 Val Ala Ala Gln Arg Met Val Cys Phe Ser Asn Ala Arg Ile Asn Gly
 112 645 650 655
 113 Val Lys Pro Glu Val Ile Gly Gly Pro Leu Gly Asn Leu Arg Pro Val
 114 660 665 670
 115 Gly Val Gly Gly Gly Asn Gly Ser Gly Ser Val Gln Cys Pro Ser Pro
 116 675 680 685
 117 His Pro Ser Ser Ser Ser Ser Gln Leu Ser Pro Gln Thr Pro
 118 690 695 700
 119 Ser Gln Thr Pro Pro Arg Gly Thr Pro Thr Val Ile Met Gly Glu Ser
 120 705 710 715 720
 121 Cys Gly Val Arg Thr Met Val Trp Gly Tyr Glu Pro Pro Pro Pro Ser
 122 725 730 735
 123 Ala Gly Gln Ser His Gly Gln His Pro Gln Gln Gln Gln Gln Ser Pro
 124 740 745 750
 125 His His Gln Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln Ser Gln
 126 755 760 765
 127 Gln Gln Gln Gln Gln Gln Gln Ser Leu Gly Gln Gln Gln His
 128 770 775 780
 129 Cys Leu Ser Ser Pro Ser Ala Gly Ser Leu Thr Pro Ser Ser Ser Ser
 130 785 790 795 800
 131 Gly Gly Gly Ser Val Ser Gly Gly Gly Val Gly Gly Pro Leu Thr Pro
 132 805 810 815
 133 Ser Ser Val Ala Pro Gln Asn Asn Glu Glu Ala Ala Gln Leu Leu Leu
 134 820 825 830
 135 Ser Leu Gly Gln Thr Arg Ile Gln Asp Met Arg Ser Arg Pro His Pro
 136 835 840 845
 137 Phe Arg Thr Pro His Ala Leu Asn Met Glu Arg Leu Trp Ala Gly Asp
 138 850 855 860
 139 Tyr Ser Gln Leu Pro Pro Gly Gln Leu Gln Ala Leu Asn Leu Ser Ala
 140 865 870 875 880
 141 Gln Gln Gln Gln Trp Gly Ser Ser Asn Ser Thr Gly Leu Gly Gly Val
 142 885 890 895
 143 Gly Gly Gly Met Gly Gly Arg Asn Leu Glu Ala Pro His Glu Pro Thr
 144 900 905 910
 145 Asp Glu Asp Glu Gln Pro Leu Val Cys Met Ile Cys Glu Asp Lys Ala
 146 915 920 925
 147 Thr Gly Leu His Tyr Gly Ile Ile Thr Cys Glu Gly Cys Lys Gly Phe
 148 930 935 940
 149 Phe Lys Arg Thr Val Gln Asn Arg Arg Val Tyr Thr Cys Val Ala Asp
 150 945 950 955 960
 151 Gly Thr Cys Glu Ile Thr Lys Ala Gln Arg Asn Arg Cys Gln Tyr Cys
 152 965 970 975
 153 Arg Phe Lys Lys Cys Ile Glu Gln Gly Met Val Leu Gln Ala Val Arg

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/585,841

DATE: 09/02/2008
TIME: 14:24:17

Input Set : E:\211010053P1.SEQ.TXT
Output Set: N:\CRF4\09022008\J585841.raw

154	980	985	990
155	Glu Asp Arg Met Pro Gly Gly Arg Asn Ser Gly Ala Val Tyr Asn Leu		
156	995	1000	1005
157	Tyr Lys Val Lys Tyr Lys Lys His Lys Lys Thr Asn Gln Lys Gln Gln		
158	1010	1015	1020
159	Gln Gln Ala Ala Gln Gln Gln Gln Gln Ala Ala Ala Gln Gln Gln		
160	1025	1030	1035
161	1040		
162	His Gln Gln Gln Gln His Gln Gln His Gln Gln His Gln Gln Gln		
163	1045	1050	1055
164	Gln Leu His Ser Pro Leu His His His His Gln Gly His Gln Ser		
165	1060	1065	1070
166	His His Ala Gln Gln His His Pro Gln Leu Ser Pro His His Leu		
167	1075	1080	1085
168	Leu Ser Pro Gln Gln Gln Gln Leu Ala Ala Val Ala Ala Ala Ala		
169	1090	1095	1100
170	Gln His Gln Ala		
171	1105	1110	1115
172	1120		
173	Lys Leu Met Gly Gly Val Val Asp Met Lys Pro Met Phe Leu Gly Pro		
174	1125	1130	1135
175	Ala Leu Lys Pro Glu Leu Leu Gln Ala Pro Pro Met His Ser Pro Ala		
176	1140	1145	1150
177	Gln Ala Ser		
178	1155	1160	1165
179	Pro His Leu Ser Leu Ser Ser Pro His Gln Gln Gln Gln Gln Gln Gln		
180	1170	1175	1180
181	Gly Gln His Gln Asn His His Gln Gln Gln Gly Gly Gly Gly Gly		
182	1185	1190	1195
183	1200		
184	Ala Gly Gly Ala Gln Leu Pro Pro His Leu Val Asn Gly Thr Ile		
185	1205	1210	1215
186	Leu Lys Thr Ala Leu Thr Asn Pro Ser Glu Ile Val His Leu Arg His		
187	1220	1225	1230
188	Arg Leu Asp Ser Ala Val Ser Ser Ser Lys Asp Arg Gln Ile Ser Tyr		
189	1235	1240	1245
190	Glu His Ala Leu Gly Met Ile Gln Thr Leu Ile Asp Cys Asp Ala Met		
191	1250	1255	1260
192	1265		
193	Glu Asp Ile Ala Thr Leu Pro His Phe Ser Glu Phe Leu Glu Asp Lys		
194	1270	1275	1280
195	1285	1290	1295
196	Lys Leu Val Ser Trp Thr Lys Lys Leu Pro Phe Tyr Leu Glu Ile Pro		
197	1300	1305	1310
198	Val Glu Ile His Thr Lys Leu Leu Thr Asp Lys Trp His Glu Ile Leu		
199	1315	1320	1325
200	Ile Leu Thr Thr Ala Ala Tyr Gln Ala Leu His Gly Lys Arg Arg Gly		
201	1330	1335	1340
202	Glu Gly Gly Gly Ser Arg His Gly Ser Pro Ala Ser Thr Pro Leu Ser		
203	1345	1350	1355
204	Thr Pro Thr Gly Thr Pro Leu Ser Thr Pro Ile Pro Ser Pro Ala Gln		
205	1360		
206	1365	1370	1375

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/585,841

DATE: 09/02/2008
TIME: 14:24:17

Input Set : E:\211010053P1.SEQ.TXT
Output Set: N:\CRF4\09022008\J585841.raw

203 Pro Leu His Lys Asp Asp Pro Glu Phe Val Ser Glu Val Asn Ser His
204 1380 1385 1390
205 Leu Ser Thr Leu Gln Thr Cys Leu Thr Thr Leu Met Gly Gln Pro Ile
206 1395 1400 1405
207 Ala Met Glu Gln Leu Lys Leu Asp Val Gly His Met Val Asp Lys Met
208 1410 1415 1420
209 Thr Gln Ile Thr Ile Met Phe Arg Arg Ile Lys Leu Lys Met Glu Glu
210 1425 1430 1435 1440
211 Tyr Val Cys Leu Lys Val Tyr Ile Leu Leu Asn Lys Gly Thr Trp Phe
212 1445 1450 1455
213 Asp Leu Gln Asn Pro Phe Ile Gln Cys Ser Cys Tyr Leu Leu Val Arg
214 1460 1465 1470
215 Phe Val Asn Pro Ala Glu Val Glu Leu Glu Ser Ile Gln Glu Arg Tyr
216 1475 1480 1485
217 Val Gln Val Leu Arg Ser Tyr Leu Gln Asn Ser Ser Pro Gln Asn Pro
218 1490 1495 1500
219 Gln Ala Arg Leu Ser Glu Leu Leu Ser His Ile Pro Glu Ile Gln Ala
220 1505 1510 1515 1520
221 Ala Ala Ser Leu Leu Glu Ser Lys Met Phe Tyr Val Pro Phe Val
222 1525 1530 1535
223 Leu Asn Ser Ala Ser Ile Arg
224 1540
226 <210> SEQ ID NO: 2
227 <211> LENGTH: 4632
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
233 synthetic construct
235 <400> SEQUENCE: 2
236 atgacactga gccgtggccc gtacagcgag ctcgataaaaa tgaggctttt tcaagacctc 60
237 aaactcaaac ggcgcaaaat cgattcgcgta tgcaagcagtgc acggcgagtc catagcgac 120
238 acgtccaccc ctgcgtggcg cccatgtcgcc cgaagctctg cgacagcgcc 180
239 tcggcggggg cgtcgtgggg ggcatcgctg cccctgccgc tggccctgccc cctgccaatg 240
240 gccctgcccc tggccatgtc gctgccccctg cccctcacgg cgccatcttc ggccgtcacc 300
241 gtttcgtgg cagcggtcggt ggcccggtgg gcccggacgg gtggcgccgg cgccggagga 360
242 gctgggacag cagtaacagc gtcgggagca ggaccatgcg tctccacgtc gtctacgacg 420
243 gcagcggcag ccacatcctc gacccctctcg ctctcgatc cctcccttc gtcatccctcc 480
244 acgtccctcca gcacttcctc cgcctcgccg acagctggag cctccctccac ggccacactgc 540
245 cccgcccagca gcagcggcag cagtgaaac ggaagtgggg gcaaaagtgg tagcatcaag 600
246 caggagcaca cggagataca ctcgtcgagc agtgcgattt cggcgccgc cgctctaaccg 660
247 gtatgtcac cggcccccgc tgaggcgacg agatccagtc cagccaccc cgagggaggc 720
248 ggaccagctg ggcacggaaatggagcaacgg ggaggcgaa acacgagcgg cggatcaacg 780
249 gctggagtgg ccattaatga acacccaaac aatggcaatg gcagcggcgg gagcggatcga 840
250 gcctctcccg attcgctggaa agagaagccc tctaccacaa cgaccacagg tcgtccaacg 900
251 ctcacgcccc caaatgggt gctgtccctcc gcctccgggg gcacggggat ttccacagga 960
252 agcagcggcca agctgagcga ggctggatgt agtgtgatac ggtccgtgaa ggaggagcgc 1020
253 ttgctcaacg tatccagcaa gatgctgggtt ttccatcagc agcggggagca agagacccaa 1080
254 gcagtggcgg ctgcagcagc agcagcagcgc gcggccatg tgacggttct agtgacgcca 1140

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/585,841

DATE: 09/02/2008

TIME: 14:24:18

Input Set : E:\211010053P1.SEQ.TXT

Output Set: N:\CRF4\09022008\J585841.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date